LDWSF
12.3.54 v6
10/07/86

Quality Assurance Plan

86-X-4-4 B Investigation*

ESD, EPA Region 10
1200 6th Avenue
Seattle, Wa. 98101

Project Code: TEC-330A

Account Code: CDEX0A

Sample #: 86410100 - 86410124

Approvals:

Project Officer: [signature] Date 7 October 86

QA Officer: [signature] Date 10-7-86

Supervisor: Paul A. Boys Date 10/7/86

*
The project name is not disclosed at this time because it is part of a criminal investigation.

1. Project Organization and Responsibility

The following is a list of key project personnel and their responsibilities:

Organization Manager Bill Schmidt, ESD; Gerd Hatwig, OCI
Project Officer Dan Bodien
QA Officer Barry Towns
Field Operation Jim Hileman
Laboratory Operation Mike Johnston
Data Quality Review Bob Reick
System/Performance Audit N/A

2. Project Description

A. Objective and Scope: A concrete plant has been observed discharging liquids and solids to a lake. The objective of this investigation is to collect samples of solid and liquid waste located at this facility.

B. Schedule of Tasks and Milestones:

Activity/Date	>	>	>	>	>	>	>
Sample Collection>	10/9/86						
Samples to Lab>		10/9/86					
Analyses Complete>			11/9/86				
Data Analysis>				12/1/86			
Survey Report>							

C. Data Usage: Will be used to support criminal investigation.

D. Monitoring network/sample collection design and rationale: Approximately 10 solid and 10 liquid samples will be collected. Sample locations will be determined on site.

# Sampl.	Sample Matrix	Collection Frequency	Analytical Parameter	Type of Sample Container	Sample Preservation	Sample Holding Time	Analytical Detection Limit
1. 10	liquid	1	***	1 qt cubi			
		***	TDS		Ice		mg/l
			SS		Ice		mg/l
			TS		Ice		mg/l
			Turbidity		Ice		NTU
			Total Alkalinity		Ice		mg/l
			pH		Ice		
			Conductivity		Ice		
2. 10	Solid	1	***	8oz glass			

3. Data Quality Objectives

   A. Precision and accuracy protocols/limits will be determined by the EPA Region 10 Laboratory in accordance with recommended protocols for establishing data quality indicators.

   B. Data Representativeness: The samples will be grab samples to represent one point and time.

   C. Data Comparability: Data will be reported according to established Regional Laboratory data reporting protocols. Samples will be analyzed according to approved analytical proceedures.

   D. Data Completeness: All samples collected are to be analyzed with appropriate supportive documentation.

4. Sampling Procedures: (Including QC Checks) The samples will be placed into a clean sample container obtained from the EPA lab, labled and sealed, and placed into an ice chest.

   Cubitainers should be held by hand when collecting samples. Cubitainers should be rinsed in the waste stream that is to be sampled prior to sample collection. Samples should be taken by pointing the neck of the cubitainer upstream and submerging below the surface of the water. If this requires the sampler to enter the stream, the sampler should be downstream of the sample location.

5. Sample Custody Procedures: The samples will be in the custody of EPA personnel at all times. EPA Region 10 chain of custody forms and procedures will be used.

6. Calibration Procedures and Preventive Maintenance: No field calibration will be done. The standard operating protocols for the Region 10 lab will be followed.

7. Analytical Methods (Including QC Checks) EPA approved methods and associated QC procedures will be followed.

8. Documentation, Data Reduction and Reporting

   A. Documentation: A field log notebook, photos and the EPA field sample data sheet will be used to document the sampling activities.

   B. Data Reduction and Reporting The Regional lab will be responsible for data validation and entry into the laboratory data management system.

9. Data Assessment: The Field and Technical Support Branch of ESD will provide an assessment of the data.

10. Performance/System Audits: routine performance audits results for the Regional Lab are on record with RQAO. No system audit is planned for this investigation.

11. Corrective Action: N/A

12. Reports: F.O.T.S.B. will prepare a report summarizing the sampling investigation including procedures, results and supporting dicumentation.

13. Safety (Optional): Rubber gloves will be worn by samplers.

Pioneer Construction
Duwamish River

Station	Date	Time	Lab#	Turbidty Meter NTU 82079	pH LAB Meter Std Unts 403	Cond@25C Meter umho/cm 95	Alkalnty Total mg/l 410	Solids T-Dissol mg/l 70300	Solids T-Suspen mg/l 530	Solids Total mg/l 500
EAST END OF WASHOUT TRENCH AT GATE	86/09/03	1812	360103	3600	13.06	9678	18000	2900	29190	30976
EAST END OF WASHOUT TRENCH AT GATE	86/09/03	1808	360104	1480	13.02	8790	8939	2520	12000	13840
SOLIDS SCREW TANK	86/09/03	1820	360105	5400	13.16	11116	24694	3330	40200	40510
LOT SETTLING BASIN	86/09/03	1830	360106	3900	13.14	10760	17959	3260	28390	29875
DUWAMISH R AT EDGE NR SOLIDS SCREW TAN	86/09/03	1845	360107	1.4	8.50	29010	106	19325	4	20793
BELOW HOLE IN WALL BEFORE 1ST SETT BAS	86/09/03	1836	360108	200	12.96	6380	2020	1562	890	2564
DUWAMISH R MID CHANNEL	86/09/03	2008	360111	1.7	7.74	30778	97.9	20676	2	22359

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